

방사선 치료를 위한 심박동기 위치 변경 1례 : 터널방법

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Repositioning of Pacemaker Generator due to Therapeutic Radiation : A Tunneling Method

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ABSTRACT

Therapeutic ionizing radiation can damage the permanent pacemaker. Reimplantation of pacemaker should be considered when the pacemaker site is included in the radiation field. We report a case of successful repositioning of preexisting pacemaker generator and leads with subcutaneous tunneling method across the sternum instead of insertion of new leads in a female patient with breast cancer who had DDD pacemaker. (**Korean Circulation J 1998;28(9):1620-1623**)

KEY WORDS : Radiation · Pacemaker · Repositioning · Tunneling method.

서론
(permanent pacemaker)
가
1)2)
가
가
generator
(lead)
가
(sick sinus syndrome)
DDD
generator
(tunneling
method)
nerator

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증례

71 6
(atrial fibrillation)

(electrical cardioversion) generator
14
(sinu arrest) generator가 (pocket)
가 3 DDD 11 Fr 30 cm long sheath((DAIG®, Minnesonta, MN)
(Cosmos ; Intermedics®, Texas, introducer/dilator , sheath
U.S.A) (Fig. 1). 1
sheath (Fig. 3).
3× 가 adaptor(medtronic®, Mi -
2 cm 가 , nneapolis, MN) generator
generator 5cm , pocket
(mammography) 가
3×2 cm
generator 5 cm
(Fig. 2).
(generator aspiration biopsy)
generator가
generator

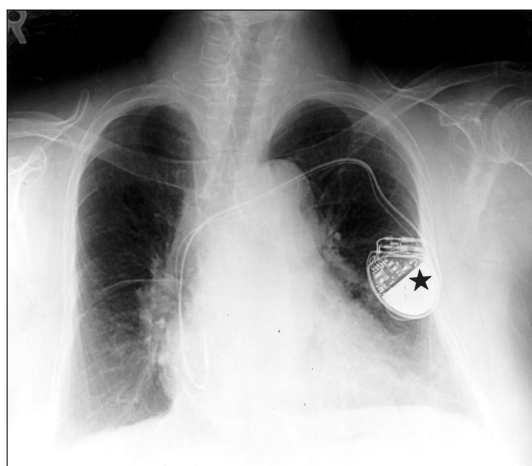


Fig. 1. Chest PA revealed the pacemaker (star) in the left infraclavicular fossa before the repositioning of the pacemaker.

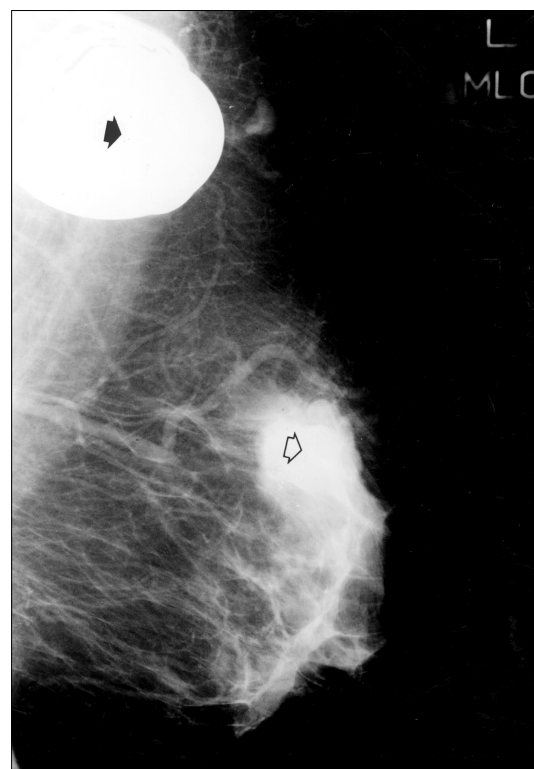


Fig. 2. The mammography demonstrates the 3×2 cm mass (open arrow) 5 cm from pacemaker generator (solid arrow) on the left breast.

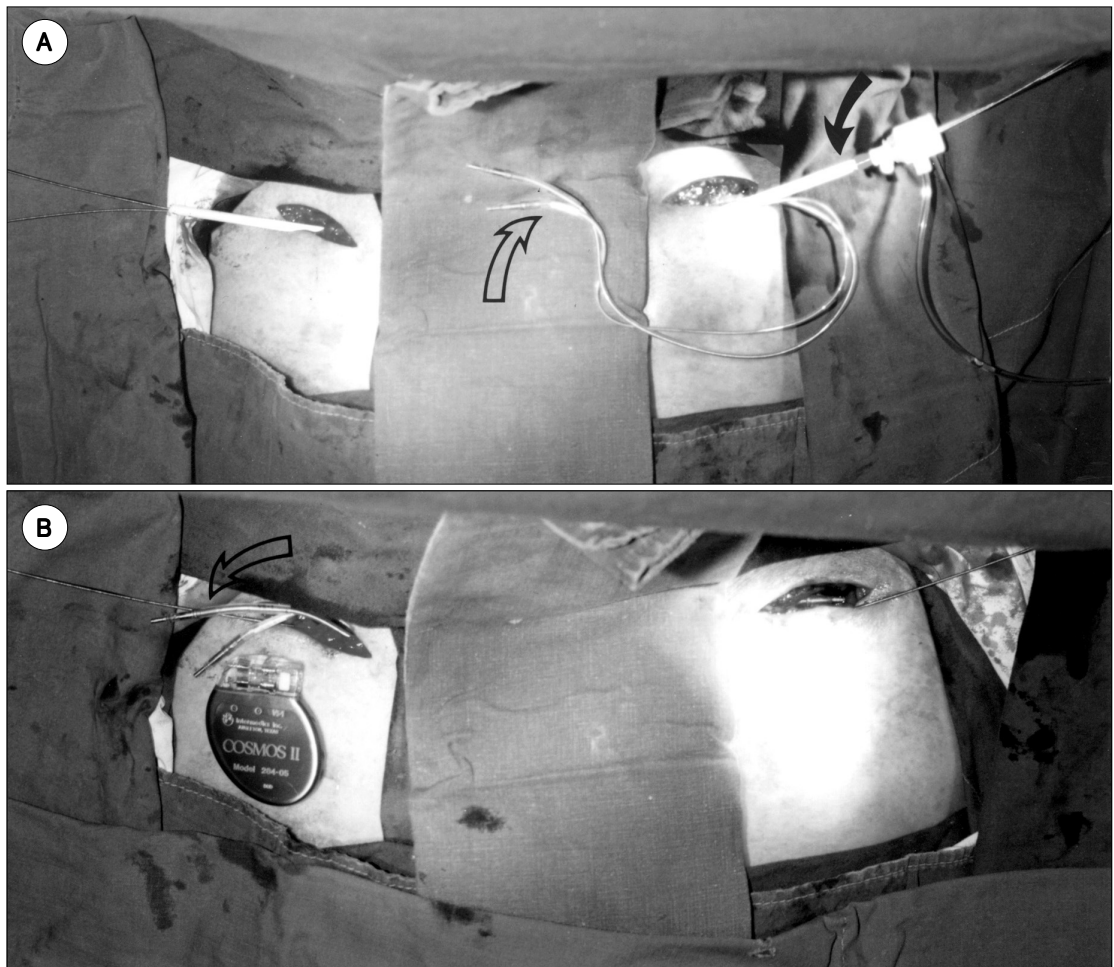


Fig. 3. The tunneling technique. A. A 11 Fr long sheath (solid arrow) is directed from the left to the right infraclavicular incisions over the sheath. The previously implanted 2 leads (open arrow) are shown on the left side of the chest. B. The proximal ends of the leads (open arrow) are pulled out through the sheath and are shown on the right subclavian pocket.

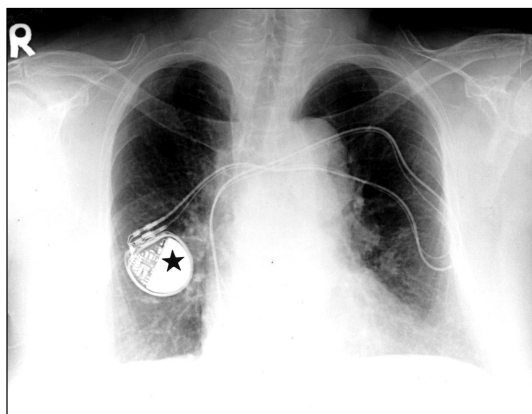


Fig. 4. Chest PA after the repositioning of the generator (star).

고 안

가

가

가 가

57.6

6)

70

191.9 , 85

295.3

7)8)

가 (cosmetic)

3가 (interference) (safty)

가

가

complementary metal oxide semico -
nductor generator generator
semiconductor circuits
(ionized radiation)

X

가

가

generator 가 (shield)
가 , generator가

3 cm

가

9) tangential breat intact

10)11)

가

가

중심 단어 :

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